

Notice of Allowability

Application No.

10/648,390

Applicant(s)

NOJIRI ET AL.

Examiner

Art Unit

Danny Nguyen

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to "The amendment filed 6/9/2005".
2. ☒ The allowed claim(s) is/are 1-8.
3. ☒ The drawings filed on 27 August 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Allowable Subject Matter

Applicant's arguments filed 6/9/2005 with respect to claims 1, 4, 5, and 6 have been fully considered and found persuasive. Claims 1-8 are allowed.

The following is an examiner's statement of reasons for allowance:

Claims 1, 4, and 5 recite a semiconductor device comprises a first protection circuit protecting the internal circuit from static electricity generated at the first input terminal, the first protection circuit including a plurality of first diode elements connected in series between the first input terminal and a line of a reference potential and conducting in response to a voltage of the first input terminal exceeding a second positive voltage higher than the first positive voltage, and plurality of second diode elements connected between the line of said reference potential and the first input terminal and conducting in response to the voltage of the first input terminal going lower than a first negative voltage; wherein each of the plurality of first diode elements and the plurality of second diode element is formed with a thin film transistor having its gate and drain connected together.

Claim 6 recites a semiconductor device comprises a first protection circuit protecting the internal circuit from static electricity generated at the first input terminal, the first protection circuit including a plurality of first diode elements connected in series between the first input terminal and a line of a reference potential and conducting in response to a voltage of the first input terminal exceeding a second positive voltage higher than the first positive voltage, and plurality of second diode elements connected

between the line of said reference potential and the first input terminal and conducting in response to the voltage of the first input terminal going lower than a first negative voltage; a second protection circuit includes a plurality of third diode elements connected in series between the line reference and the second input terminal, a fourth diode element connected between the second input terminal and the line reference, a third protection circuit includes a plurality of fifth diode elements connected in series between the third input terminal and the line reference, a plurality of sixth diode elements connected in series between the line reference and the third input terminal.

The references of record do not teach or suggest the aforementioned limitation, nor would it be obvious to modify those references to include such limitation

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Nguyen whose telephone number is (571)-272-2054. The examiner can normally be reached on Mon to Fri 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DN

DN
8/12/2005

Stephen W. Jackson
8-18-05

STEPHEN W. JACKSON
PRIMARY EXAMINER